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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,504	08/29/2001	Shean-Guang Chang	ORACL-01063US1	9220

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EXAMINER	
SHINGLES, KRISTIE D	
ART UNIT	PAPER NUMBER
2141	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/942,504	CHANG ET AL.	
	Examiner	Art Unit	
	KRISTIE D. SHINGLES	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8-24 and 26-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8-24 and 26-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Per Applicant's Request for Continued Examination
Claims 8, 15 and 21-24 have been amended.
Claims 1-7, 25 and 31 have been canceled.

Claims 8-24 and 26-30 are pending.

Continued Examination Under 37 CFR 1.114

I. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/23/2008 has been entered.

Response to Arguments

II. Applicant's arguments with respect to claims 8, 15 and 21-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

III. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-24 and 28-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The "means" for the computer readable media and system code are directed towards software and thus fail to qualify as statutory matter.

Claim Rejections - 35 USC § 103

IV. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

V. Claims 8, 10, 15, 17 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Subbiah et al* (US 6,538,992) in view of *Saxe* (US 5,631,908) in further view of *Zweig et al* (US 7,280,495).

a. **Per claim 8**, *Subbiah et al* teach the system for providing two qualities of service from a single data stream, comprising:

- storing at least one of a first quality of service choice and a second quality of service choice for each user of the system (*col.2 lines 42-62, col.3 lines 18- 28, col.5 lines 31-36, col.6 lines 59-64—storing the users QoS choice in memory*); and

- receiving one or more messages and processing each message received on a data stream using a single API (*col.5 lines 1-44, col.6 lines 59-64*);

Subbiah et al fail to explicitly teach segregating a plurality of users into a first group and a second group according to the quality of service choice associated with said each user; multicasting the message to each user selecting the first quality of service, sending the

message directly to each user selecting the second quality of service via point-to-point protocol and ensuring that the user receives the message; and receiving a response that delivers an acknowledgement of receipt of the message from the second group of users selecting the second quality of service choice and receiving no acknowledgement from the first group of users selecting the first quality of service choice; wherein multicasting the message and transmitting the message via the point-to-point protocol is performed such that a single message received to the system is transmittable via both qualities of service.

However, *Saxe* explicitly teaches supporting multiple QoS based on traffic type for each flow: constant bit rate (CBR), variable bit rate (VBR), unspecified bit rate (UBR); while implementing a method to schedule multicast traffic on a subset of slots within a frame and then scheduling unicast traffic on the remaining slots of the frame (*col.24 line 64-col.25 line 8*). Furthermore, *Zweig et al* teach separate groups of users based on the unicast and multicast quality of service, wherein the unicast users acknowledge receipt of the data (*Abstract, col.1 lines 51-62, col.5 line 54-col.6 line 66*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Subbiah et al* with *Saxe* for the purpose of providing a storage space for maintaining the type quality of service specific to each user and providing separate multicasting and unicasting quality of service capabilities in order to transmit packets according to their associated service levels—wherein packets of a particular quality/class of service are given priority over other packets. Futhermore it would have been obvious to modify the combined systems of *Subbiah et al* and *Saxe* with *Zweig et al* in order to create

separate user groups for the unicast and multicast services, with acknowledgement of the unicast messages, which is common in the art.

b. **Claims 15 and 21-24** contain limitations that are substantially equivalent to claim 8 and are therefore rejected under the same basis.

c. **Per claim 10,** *Subbiah et al* and *Saxe* with *Zweig et al* teach the method according to claim 8, *Subbiah et al* further teach the method further comprising a listener that listens for information sent in the data stream to one of the users of the system (*col.7 lines 1-37; Saxe: col.2 line 24-col.3 line 65, col.6 lines 1-65*).

d. **Claim 17** is substantially similar to claim 10 and is therefore rejected under the same basis.

VI. Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Subbiah et al* (US 6,538,992) and *Saxe* (US 5,631,908) in view of *Zweig et al* (US 7,280,495) in further view of *Lefebvre* (US 7,123,619).

a. **Per claim 11,** *Subbiah et al*, *Saxe* and *Zweig et al* teach the method according to claim 8 as applied above. *Subbiah et al* teach the use of queues for each specified QoS, allowing users to specify different QoS parameters for different application services, and provisioning voice, data and/or video packets with different QoS requirements (*col.4 lines 56-62, col.5 lines 47-51, col.8 lines 3-5*), yet fails to explicitly teach the method further comprising the step of queuing messages sent to a user by either quality of server to be delivered one by one to the user. However, *Lefebvre* specifically discloses users having the ability to transmit and receive data with different QoS with virtual channels allocated to each QoS (*col.1 lines 61-65, col.6 lines 59-61*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Subbiah et al*, *Saxe* and *Zweig et al* with *Lefebvre* for allowing

user's to receive data with different QoS levels since users are known to transmit and receive different types of data, wherein different types of data such as voice and video require service constraints different from data such text and documents.

b. **Claim 18** is substantially similar to claim 11 and is therefore rejected under the same basis.

VII. Claims 9, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Subbiah et al* (US 6,538,992) and *Saxe* (US 5,631,908) in view of *Zweig et al* (US 7,280,495) in further view of *Henderson et al* (US 7,133,400).

a. **Per claim 9,** *Subbiah et al, Saxe* and *Zweig et al* teach the method according to claim 8 as applied above. *Subbiah et al* teach the allowing users to specify different QoS parameters for different application services, and provisioning voice, data and/or video packets with different QoS requirements (*col.4 lines 56-62, col.5 lines 47-51, col.8 lines 3-5*), yet fails to explicitly teach the method further comprising the step of filtering the messages received by a user by either quality of service. However, *Henderson et al* specifically teach implementing a filtering engine that filters messages based on the user's QoS requirements (*col.10 lines 44-63*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Subbiah et al, Saxe* and *Zweig et al* with *Henderson et al* for provisioning a system that filters messages. Filtering is well-known in the art, wherein filtering techniques are commonly used in communications for secured transmissions to ensure data integrity.

b. **Claims 14 and 16** are substantially similar to claim 9 and are therefore rejected under the same basis.

VIII. Claims 12, 13, 19, 20 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Subbiah et al* (US 6,538,992) and *Saxe* (US 5,631,908) in view of *Zweig et al* (US 7,280,495) in further view of *Baum et al* (US 6,850,495).

a. **Per claim 12,** *Subbiah et al*, *Saxe* and *Zweig et al* teach the method according to claim 8 as applied above, yet fail to further explicitly teach the method further comprising the step of tagging each message with a sequence number so that a user can tell if a message has been missed. However, *Baum et al* teach the use of sequence numbers in packet transmission for flow and error control (*col.2 lines 25-45, col.3 line 66-col.4 line 16 and col.5 line 5-col.6 line* 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Subbiah et al*, *Saxe* and *Zweig et al* with *Baum et al* for the purpose of providing sequence numbers in packet messages in order to insure the proper reassembly of the packets at the receiving end. Utilizing sequence numbers in packet transmission protocols is a common and well-known technique in the art for providing flow and error control indicia.

b. **Claim 19** is substantially similar to claim 12 and is therefore rejected under the same basis.

c. **Per claim 13,** *Subbiah et al*, *Saxe* and *Zweig et al* teach the method according to claim 8 as applied above, yet fail to further explicitly teach the method further comprising the step of tagging each message so that a user can tell the data stream from which the message was received. However, *Baum et al* teach the use of sequence numbers in packet transmission for flow and error control (*col.17 lines 20-62, col.19 line 16-col.20 line 21 and col.23 line 25-col.24 line 12*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Subbiah et al*, *Saxe* and *Zweig et al* with *Baum et al* for the purpose of providing sequence numbers in packet messages in order to insure the proper

reassembly of the packets at the receiving end. Utilizing sequence numbers in packet transmission protocols is a common and well-known technique in the art for providing flow and error control indicia.

d. **Claim 20** is substantially similar to claim 13 and is therefore rejected under the same basis.

e. **Per claim 26,** *Subbiah et al*, *Saxe* and *Zweig et al* teach the method according to claim 8 as applied above, yet fail to further explicitly teach the method wherein the step of ensuring that the user receives the message includes receiving a response which delivers an acknowledgement of the receipt of data from that user. However, *Baum et al* teach acknowledgement that are sent back from the receiving user (*col.2 lines 25-31, col.4 lines 9-16*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Subbiah et al*, *Saxe* and *Zweig et al* with *Baum et al* for the purpose of sending messages that acknowledge the receipt of data. Acknowledgement messages are commonly used in the art to confirm the receipt of messages at the receiving terminal or destination.

f. **Claims 27-30** are substantially similar to claim 26 and are therefore rejected under the same basis.

Conclusion

IX. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Krause et al (7346699), Segura et al (6360076).

X. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie D. Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie D. Shingles
Examiner
Art Unit 2141

/KDS/

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2144